ecology and environment, inc.

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International Specialists in the Environmental Sciences

PRELIMINARY SITE INSPECTION REPORT OF OWENS-CORNING FIBERGLAS CORPORATION FIBERBOARD PLANT ST. HELENS, OREGON

TDD R10-8408-31

Report Prepared By: Ecology and Environment, Inc.
Project Leader: Jim Pitts
Date: December 21, 1984

Submitted To: J.E. Osborn, Regional Project Officer
Field Operations and Technical Support Branch
U.S. Environmental Protection Agency
Region X
Seattle, Washington

PRELIMINARY
SITE INSPECTION REPORT

Owens-Corning Fiberglas Corporation-Fiberboard Plant
TDD R10-8408-31

Site Name/Address

Owens-Corning Fiberglas Corporation (OCFC)
Fiberboard Plant
Old Portland Road
St. Helens, OR 97051

Investigation Participants

James Pitts, Ecology and Environment, Inc. (E&E), Seattle
(206) 624-9537
Eileen Black, E&E, Chicago (312) 663-9415

Principal Site Contacts

Marlene Warren, OCFC Facilities Manager (503) 397-0704
Bob Lalande, OCFC Security and Maintenance Supervisor

Date of Inspection

8-30-84, 1400 hours

1.0 Introduction

Owens-Corning Fiberglas has been identified by U.S. Environmental Protection Agency (EPA) Region X and Oregon Department of Environmental Quality (DEQ) from preliminary assessment screening as requiring additional information to accurately profile the nature and extent of past waste disposal activity at the site. Ecology and Environment, Inc. (E&E) has been requested by EPA under Technical Directive Document No. R10-8408-31 to conduct a site inspection and evaluate the facility's status within the agency's Uncontrolled Hazardous Waste Site Program. This report summarizes the results of E&E's preliminary site inspection and is divided into the following sections:

- Physical Conditions of the Site
- Climate
- Geology and Hydrology
- History of the Site
- Overview of Facility Process
- Trip Observations

2.0 Physical Conditions of the Site

Location

The Owens-Corning Fiberglas Corporation's Fiberboard Plant (OCFC) is located at 1645 Railroad Avenue in St. Helens, Oregon. The site is situated in the southeast 1/4 of Section 9, Township 4 N., Range 1 W.; latitude 45°50'50", longitude 122°49'22" (Figure 1) (1).

The plant is located 1 mile south of St. Helens, Oregon, and occupies approximately 175 acres. Scappoose Bay borders the plant on the south and west. Milton Creek is on the eastern border. The area to the north of the plant is undeveloped.

The land use in the vicinity of the plant is considered to be light industry. The plant is served by Burlington Railroad, which has a spur onto the site. It is estimated that the population within a 1 mile radius of the plant is approximately 600.

3.0 Climate

According to the Climatic Atlas of the United States, the St. Helens area receives approximately 48 inches of total precipitation annually with a mean annual lake evaporation rate of 24 inches. About 78 percent of the precipitation falls in the period from October to March. Average maximum 2-year, 24-hour rainfall is 2 inches. The St. Helens area is characterized by a damp, marine-type climate. The warmest months are in July and August with high temperatures averaging 79°F; the coolest months are January and February with low temperatures averaging 34°F.

4.0 Geology and Hydrology

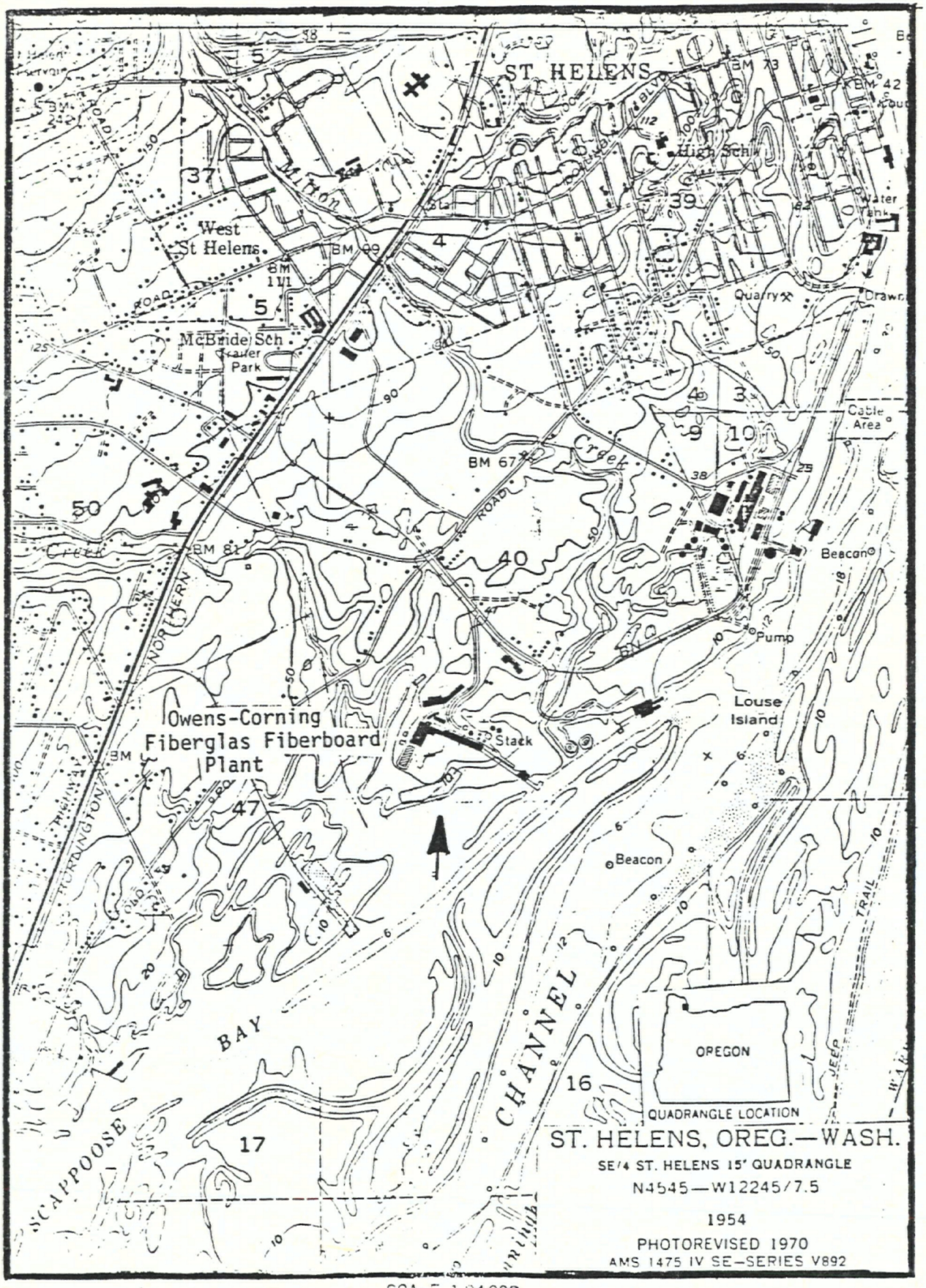
Geology

Two soil types are encountered at the OFCF plant. On the outer fringe of the plant is Sauvie silt loam. The Sauvie series consists of poorly-drained soils formed in recent silty alluvium. Typically, the surface layer is very dark grayish-brown silty clay loam about 15 inches thick. The subsoil is dark grayish-brown mottled silty loam, about 24 inches thick. The substratum is dark grayish-brown mottled very fine sandy loam, about 21 inches thick. Elevations range from 10 to 20 feet (Figure 1). The inner plant area consists of rock outcrop xerumbrepts complex, undulating xerumbrepts parts. Xerumbrepts consist of shallow, well drained, medium-textured soils. Depth to igneous rock is 10 to 19 inches (2).

The soil depth to basalt bedrock in the inner plant area is approximately 19 inches and has a fluctuating water table, which is less than 6 feet below the surface. In the plant outer area the depth to bedrock is less than 60 inches, and the water table is approximately one foot below the surface of the ground (2).

FIGURE 1
OWENS-CORNING FIBERGLAS FIBERBOARD PLANT

Arrow points to general vicinity of site



The soil permeability of the inner plant area is 2.5×10^{-2} to 8.4×10^{-2} cm/sec; the outer fringe area ranges from 8.4×10^{-3} to 2.5×10^{-1} cm/sec (2).

Groundwater

There is one registered water well located upgradient in Section 9 near the Owens-Corning plant (Appendix A). The St. Helens Water Department collects water 2.5 miles downstream from the site with two wells located on the bank of the Columbia River. One of the wells is 34 feet deep and the other is 50 feet deep. The wells are 2,000 feet apart (3). The water department serves approximately 5,000 units or a population equivalent to approximately 7,000 people. The analytical results of a groundwater sample from a St. Helens Water Department well, tested for secondary drinking water parameters, are shown in Appendix B. Data on primary drinking water standards for the well are not available.

5.0 History of the Site

OCFC fiberboard plant located in St. Helens, Oregon, was built in 1930. The plant was initially owned and operated by Fir-Tex Insulation Board Company. In November, 1956, Kaiser Gypsum Company purchased the facility and operated it until August, 1978, when OCFC purchased the plant. The plant operation was suspended in December, 1981. The plant has not been in operation since that time, and there are no plans to resume operation (4).

On June 9, 1981, OCFC submitted §103(C) Notification of Hazardous Waste Site Information as required by the Comprehensive Environmental Response, Compensation and Liabilities Act of 1980 (CERCLA) to the Region X EPA (Appendix C). The primary concern of the EPA at the facility is that process chemicals used during the fiberboard production may have entered the groundwater or the Scappoose Bay system. These chemicals may have included: aluminum sulfate, arsenic, asbestos, asphalt, chlorine, clay, gypsum, lime, and soda ash, starch, waste acrylic paint and solvent (4).

6.0 Overview of Facility Process

The process of the production of fiberboard has remained basically the same since 1930. The process of manufacturing fiberboard at Owens-Corning consisted of the following steps (Figures 2,3) (5):

1. Wood chips were softened in digesters by steam and chemicals.
2. Hot chips were placed in a refiner where they were rolled, rubbed and pulled until the fibers were separated into fiber stock.
3. Fiber stock was then sent to the Fourdrinier board-forming machine where the fiber stock was dewatered and formed into board.

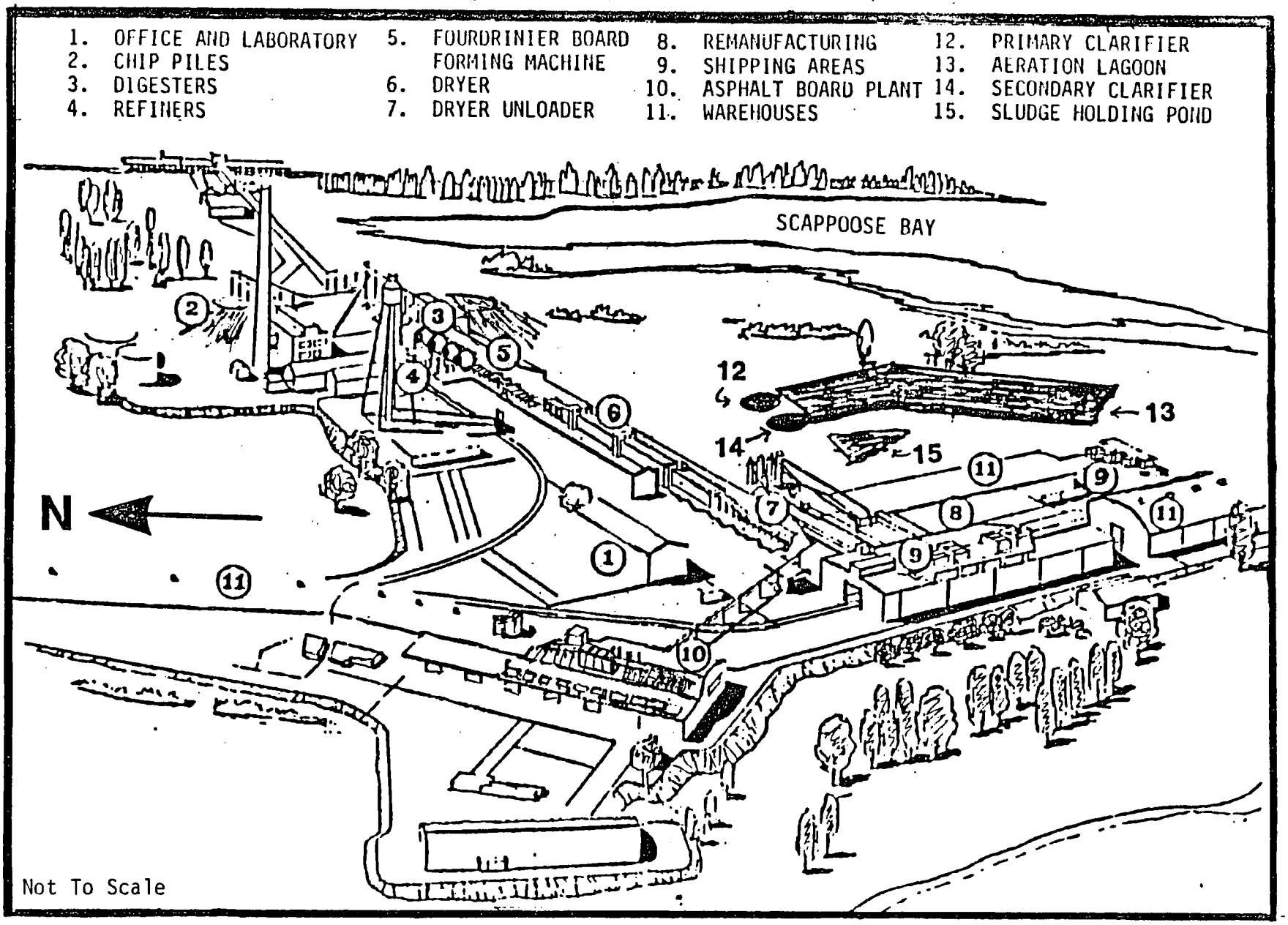


FIGURE 2

OWENS-CORNING FIBERBOARD PLANT

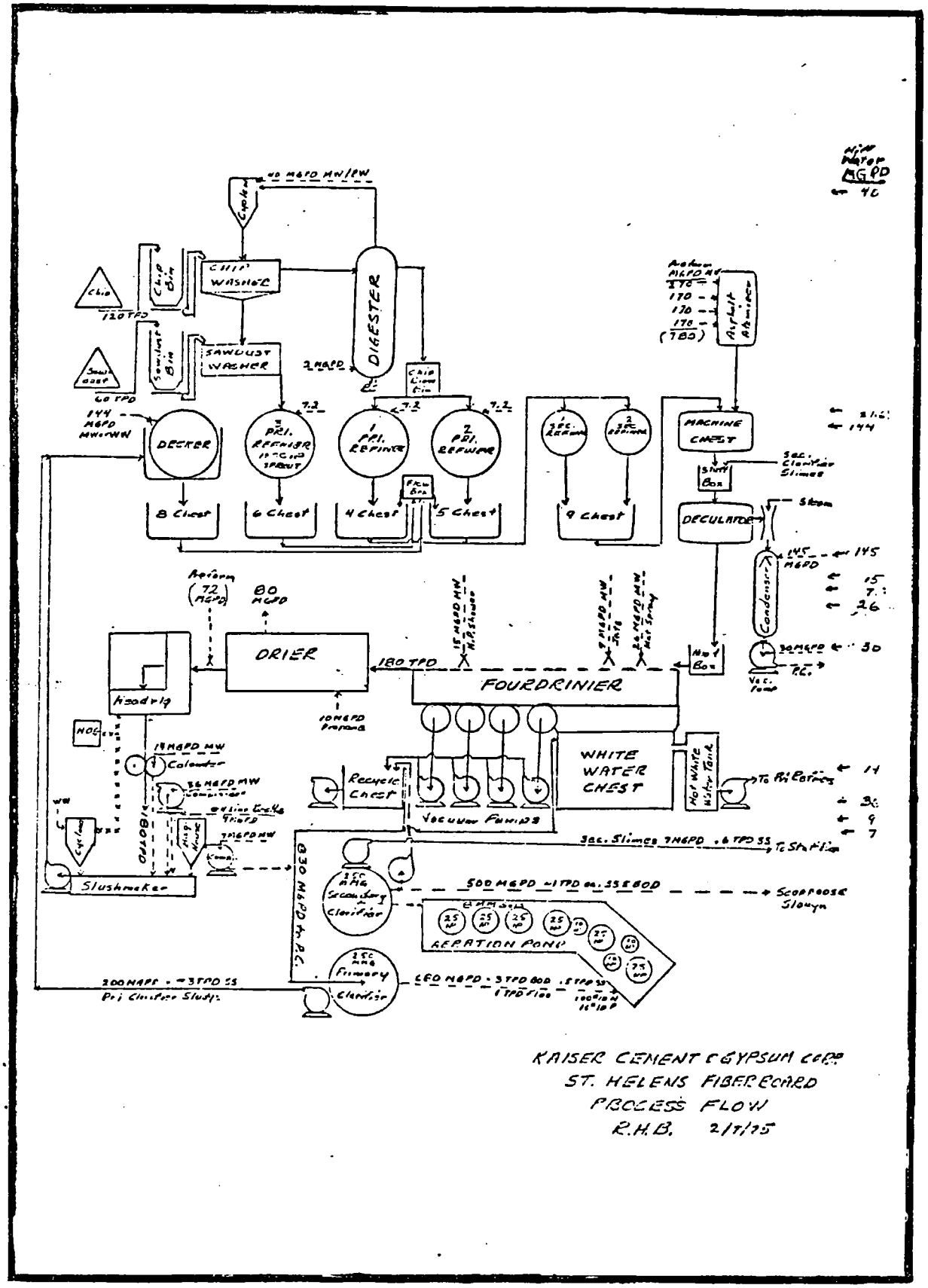


FIGURE 3
OWENS-CORNING PROCESS FLOW CHART

4. The board was painted, dried and cut into desired lengths.
5. If asphalt board or expansion-joint board were being produced the board would be either sprayed or dipped into an asphalt-naptha solution.

The asphalt board and expansion joint process was discontinued in the early '70's (4).

Waste Generated and Disposal Practices

The different types of waste-generated and disposal practices used by the fiberboard plant are shown in Table 1.

Prior to 1960, the fiberboard plant discharged wastewater to Scappoose Bay. A wastewater facility was constructed on-site to handle wastewater produced by the fiberboard manufacturing process. The facility consisted of the following: a primary clarifier constructed of cement, an aeration basin that was rock-lined, and a secondary clarifier constructed of cement. The effluent was then discharged to Scappoose Bay under a NPDES permit (Figure 4).

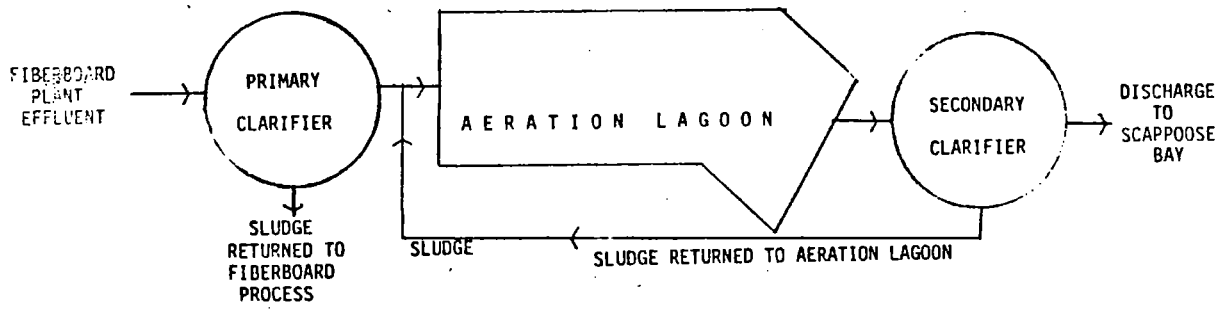


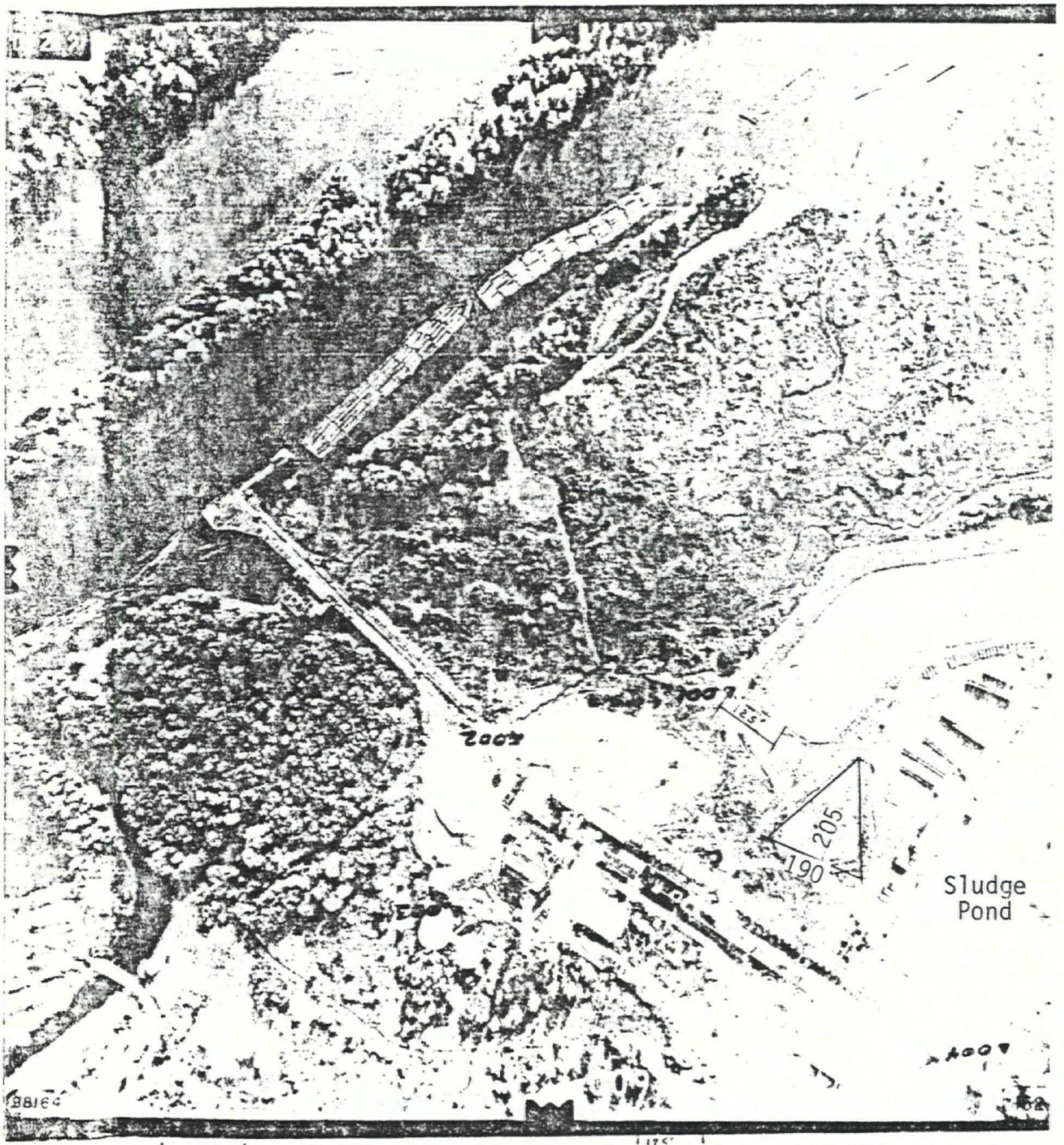
FIGURE 4
SCHEMATIC OF WASTEWATER FLOW
1960-JUNE 1973

The OCFC fiberboard plant effluent was regulated by NPDES Permit No. OR-200157-1(3479-J) and monitored for flow, pH, biological oxygen demand and chlorine residual. The discharge of the effluent was discontinued when the fiberboard plant operation was suspended in 1981.

TABLE 6.1 TYPES AND DISPOSAL METHODS OF WASTE

Type of Waste	Possible Constituents	Period	Disposal Techniques
Fiberboard process wastewater facility discharge	Fiberboard process wastewater*	1930-1960	Raw wastewater discharged to Scappoose Bay
		1960-1975	Secondary treated waste water discharged to Scappoose Bay
		1975-1981	Secondary treated waste water recycled and excess discharged Scappoose Bay
Fiberboard process wastewater with asbestos	Fiberboard process wastewater* with asbestos	1962-1966	Secondary treatment discharge to Scappoose Bay. Asbestos entered sludge (see Table 6.2)
Fiberboard process wastewater with arsenic	Arsenic and fiberboard process wastewater*	1970's period unknown	Secondary treatment discharge to Scappoose Bay. Arsenic information is unavailable.
Wastewater facility sludge	Fiberboard process wastewater* and settleable solids	1930-1960	Raw wastewater with solids discharged to Scappose Bay.
		1960-1973	Sludge held in aeration lagoon.
		1973-1975	Sludge held in sludge holding pond and applied to farm land.
		1975-1980	Sludge recycled back to process. Excess sludge applied to farm land.
		1980	400,000 gallons disposed at Santosh Disposal Facility.
		1983	7200 cubic yards in on-site holding pond (Figure 7).
Mixed solids	Cardboard, crates, fiberboard scraps, general burnable refuse	1930-1970	Burned on-site

*Fiberboard plant process wastewater and wastewater sludge may include the following chemicals: aluminum sulfate, arsenic, asbestos, asphalt, chlorine, clay, gypsum, lime, soda ash, starch, waste acrylic paint and solvent.



1/2 x 190' x 205' = 19,475 sqft; 19,475 sqft x 10 ft* = 194,750 cubic ft.
194,750 cubic ft ÷ 27 cubic ft/yd. = 7,212 cubic yards
* 10 foot depth of pond is an estimation

Figure 7

Owen-Corning Fiberglas Fiberboard

Sludge Pond Dimensions

The early design of the wastewater system did not have a provision for disposing of excess solids from the aeration lagoon. This caused an overloaded secondary clarifier and a violation of the discharge permit. This problem was solved in 1973 by removing solids from the aeration lagoon to an unlined, sludge holding pond. These solids were then applied to agricultural land (Figure 5).

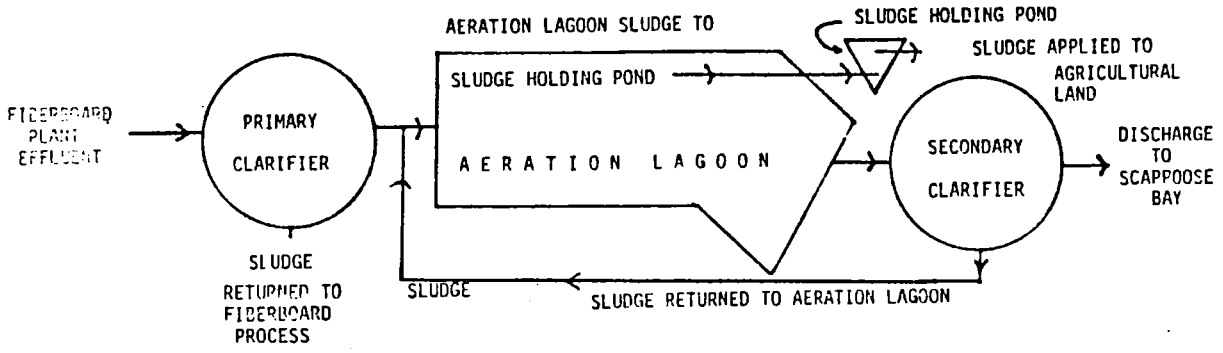


FIGURE 5
SCHEMATIC OF SOLIDS REMOVAL
JULY 1973

In 1975 the wastewater treatment facility was upgraded. The secondary sludge was returned to the fiberboard forming process, aeration lagoon sludge removed to sludge holding pond, and secondary effluent returned to the fiberboard forming process Figure 6).

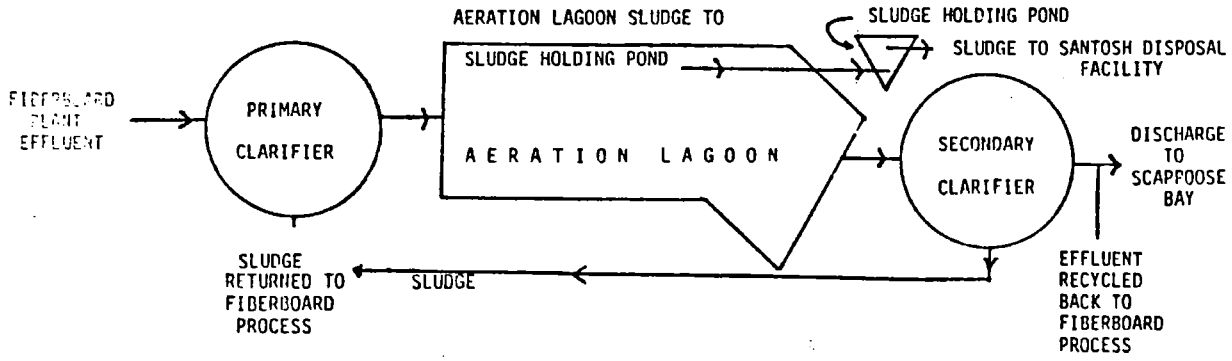


FIGURE 6
SCHEMATIC OF UPGRADED PLANT
1975

Characteristics of Waste

In October, 1980, OCFC (formerly Kaiser Gypsum) requested permission to dispose of sludge at the Santosh Disposal Facility located in southwest Columbia County. Permission was granted to dispose of 400,000 gallons of dredge solids from the aeration lagoon. OCFC was requested to test the sludge prior to disposal at the Santosh Disposal Facility.

The amount of sludge remaining in the unlined holding pond is estimated at 7200 cubic yards. There are no plans to dispose of the sludge as of 9/30/84. The sludge from the holding pond and the aeration lagoon were tested in 1980 by Owens-Corning using the EP Toxicity test. The concentrations of metals found in the extract are shown in Table 1.

TABLE 6.2
EP TOXICITY TEST RESULTS

Metals	Sludge Holding Pond	Lagoon Sludge	EP Toxicity Limit (13)
Arsenic	0.01 mg/l	0.003 mg/l	5.0 mg/l*
Antimony	0.002 mg/l	ND	1.0 mg/l
Selenium	0.01 mg/l	<0.001 mg/l	1.0 mg/l

*These values are all below the EP Toxicity limits set for hazardous waste. ND - None Detected

The following concentrations of organics from the EPA priority pollutants were found in the effluent in 1980 by Owens-Corning.

Chemical	Concentration (ug/l)
Methylene Chloride	9.08
Pentachlorophenol	1.126
Di-N-butylphenol	1.52

Owens-Corning believes the pentachlorophenol was applied to some logs as a preservative. By-products from these logs were wood chips and/or sawdust which Owens-Corning used as a raw material in the fiberboard process.

The air emission from the plant operation was regulated by an Oregon DEQ Air Contaminant Discharge permit number 05-2085, which monitored the visible and particulate emissions at the facility. The Oregon DEQ found the facility in compliance and recommended air permits be approved. This permit was initially issued in 1977 and reissued by the Oregon DEQ in 1981 (12).

7.0 Trip Observations

On August 30, 1984, inspectors from E&E met at the OCFC plant in St. Helens, Oregon, with Marlene Warren, facilities manager, and Bob Lalande supervisor of security and maintenance. The following information was provided.

- o Plant ceased operation in December 1981. No plans to resume operation.
- o Wastewater facility is not in operation and there is no discharge.
- o Chemicals used at the site were: aluminum sulfate, arsenic, asbestos (1962-1966), asphalt, chlorine, clay, gypsum, lime, soda ash, starch, naptha, waste acrylic paint and solvents, Appendix D.
- o Open burning of boxes and scrap occurred until early 1970.
- o Treatment plant constructed early 1960's.
- o Plant on St. Helens city water.
- o Lagoon and sludge holding pond are unlined.
- o Viewed old photographs.
- o Plant was on septic system at one time.
- o Arsenic use in 1970's.
- o Some plant machinery is being removed.
- o Plant had two permits--Air and NPDES.
- o Plant had a spill prevention plan (SPCC).

After completing the interview, the inspectors toured the plant and wastewater facility.

The wastewater facility was not in operation, and there was no discharge. The sludge holding pond was observed to be nearly full. The sludge was dry and very fiberous. There has not been any additional sludge added to the pond since 1981. There are no current plans to dispose of the remaining sludge stored at the facility.

After completing the tour of the facility, the inspectors returned to the plant office. The inspectors left the site at 1700 hours.

SITE EVALUATION AND RECOMMENDATIONS
OWENS-CORNING FIBERGLASS CORPORATION

Site Evaluation

There are approximately 7200 cubic yards of sludge in the plant holding pond (Figure 7). There are no plans by Owens-Corning to remove the sludge from the site.

EP toxicity test results from 1981 indicate that the sludge does not exhibit hazardous waste characteristics.

The leaching tendency of selected metals from the sludge has been demonstrated by the EP toxicity test. It is possible that these chemicals have migrated into the groundwater below the site and into the shallow aquifer. No sampling has been conducted since 1981. All discharges of wastewater effluent have ceased since 1982.

Recommendations

The available inorganic or organic analytical data does not appear to indicate a hazard from the leaching or discharge of contaminants from the sludge holding pond. However, current sampling data from the sludge pond should be considered to confirm earlier sampling along with sampling nearby drinking water wells and Scappoose Bay on a low priority basis.

Site Evaluation and Recommendations

Owens-Corning Fiberglas Corporation

Site Evaluation

There are approximately 7200 cubic yards of sludge in the plant holding pond (Figure 7).

There are no plans by Owens-Corning to remove the sludge from the site.

EP Toxicity test results indicate that the sludge does not exhibit hazardous waste characteristics.

The leaching tendency of selected metals from the sludge has been demonstrated by the EP Toxicity test. It is possible that these chemicals have migrated into the groundwater below the site and into the shallow aquifer. No sampling has been conducted since 1981. All discharges of wastewater effluent have ceased since 1982.

Recommendations

The available inorganic or organic analytical data does not appear to indicate a hazard from the leaching or discharge of contaminants from the sludge holding pond. (Additional sample collection from the sludge pond may be considered on a low priority basis if confirmation of the earlier results provided by OCFC is desired.) The results of available analytical data indicates that the sludge currently stored at the facility is considered to be non-hazardous under RCRA and as such no further actions should be taken at the site.

Revised recommendations

REFERENCES

1. USGS St. Helens Quadrangle, Photo Revised 1970.

2. Soil interpretation record, Columbia County USDA-SCS,06-81, E&E file.

3. Phone conversation with Mr. Nate Waldron, St. Helens Water Department, 8/22/84.

4. Ecology and Environment, Inc., Site Inspection 8/30/84.

5. Kaiser Gypsum Company, tour pamphlet.

6. Memo. DEQ to Kaiser Gypsum, July 23, 1973. Summary of Status of the Wastewater Treatment System.

7. Rolf Larson Excavating, Letter, April 29, 1974. Acceptance of sludge for disposal on his property (E&E file).

8. Letter from Kaiser Gypsum to Oregon DEQ, June 7, 1974. Sludge disposal on Miller's property.

9. Letter from Kaiser Gypsum to Oregon DEQ, March 14, 1975. Treatment plant upgrade.

10. Letter from Oregon DEQ to Santosh Disposal Corporation, November 10, 1980. Authorization to dispose of dredge solids from Owens-Corning Fiberglas Corporation.

11. Owens-Corning Fiberglas Discharge Monitoring Report, EPA Form 3320-1.

12. Air Contaminant Discharge Permit Application Review Report, 8/25/81.

13. Federal Register, May 19, 1980, EP Toxicity Standards.

LIST OF APPENDICES

APPENDIX A

NOTICE TO WATER WELL CONTRACTOR
The original and first copy of this report are to be filed with the

STATE ENGINEER, SALEM, OREGON 97310
within 30 days from the date of well completion.

WATER WELL REPORT

STATE OF OREGON

(Please type or print)

(Do not write above this line)

RECEIVED
FEB 2 1973
STATE ENGINEER
SALEM, OREGON

State Well No. 4N/1W-9

State Permit No.

(1) OWNER:
Name Brian L. Miller
Address 2185 Gable Road St. Helens, Ore.

(2) TYPE OF WORK (check):
New Well ☒ Deepening ☐ Reconditioning ☐ Abandon ☐
If abandonment, describe material and procedure in Item 12.

(3) TYPE OF WELL:
Rotary ☒ Driven ☐
Cable ☐ Jetted ☐
Bored ☐

(4) PROPOSED USE (check):
Domestic ☒ Industrial ☐ Municipal ☐
Irrigation ☐ Test Well ☐ Other ☐

(5) CASING INSTALLED:
Threaded ☐ Welded ☒
6 " Diam. from 0 ft. to 19'-3" ft. Gage 1/4-wall
" Diam. from ft. to ft. Gage
" Diam. from ft. to ft. Gage

(6) PERFORATIONS:
Perforated? ☐ Yes ☒ No.
Type of perforator used
Size of perforations in. by in.
perforations from ft. to ft.
perforations from ft. to ft.
perforations from ft. to ft.

(7) SCREENS:
Well screen installed? ☐ Yes ☒ No
Manufacturer's Name
Type Model No.
Diam. Slot size Set from ft. to ft.
Diam. Slot size Set from ft. to ft.

(8) WELL TESTS:
Drawdown is amount water level is lowered below static level
Was a pump test made? ☐ Yes ☒ No If yes, by whom?
gal./min. with ft. drawdown after hrs.
" " "
air " " "
test 8 gal./min. with 102 ft. drawdown after 1 hrs.
Artesian flow g.p.m.
Temperature of water Depth artesian flow encountered ft.

(9) CONSTRUCTION:
Well seal—Material used Cement
Well sealed from land surface to 18'-6" ft.
Diameter of well bore to bottom of seal 9 in.
Diameter of well bore below seal 6 in.
Number of sacks of cement used in well seal 2-1/2 sacks
Number of sacks of bentonite used in well seal sacks
Brand name of bentonite
Number of pounds of bentonite per 100 gallons of water lbs./100 gals.
Was a drive shoe used? ☐ Yes ☒ No Plugs Size: location ft.
Did any strata contain unusable water? ☐ Yes ☒ No
Type of water? depth of strata
Method of sealing strata off
Was well gravel packed? ☐ Yes ☒ No Size of gravel:
Gravel placed from ft. to ft.

(10) LOCATION OF WELL:
County Columbia Driller's well number
¼ ¼ Section 9 T. 4N R. 1W W.M.
Bearing and distance from section or subdivision corner

(11) WATER LEVEL: Completed well.
Depth at which water was first found 28 ft.
Static level 18 ft. below land surface. Date 2-7-73
Artesian pressure lbs. per square inch. Date

(12) WELL LOG:
Diameter of well below casing 6
Depth drilled 140 ft. Depth of completed well 140 ft.

Formation: Describe color, texture, grain size and structure of materials; and show thickness and nature of each stratum and aquifer penetrated, with at least one entry for each change of formation. *Report each change in position of Static Water Level and indicate principal water-bearing strata.*

MATERIAL	From	To	SWL
Top soil	0	3	
Hard blue rock	3	28	
Brown lava rock	28	35	
Blue hard rock	35	125	
Blue broken rock	125	140	

Work started 2-7-73 19 Completed 2-7-73 19
Date well drilling machine moved off of well 2-7-73 19

Drilling Machine Operator's Certification:
This well was constructed under my direct supervision. Materials used and information reported above are true to my best knowledge and belief.
[Signed] Ralph Turner (Drilling Machine Operator) Date 2-10-73 19
Drilling Machine Operator's License No. 254

Water Well Contractor's Certification:
This well was drilled under my jurisdiction and this report is true to the best of my knowledge and belief.
Name Ralph Turner Drilling Co. (Person, firm or corporation) (Type or print)
Address Rte 1 Box 141 Hillsboro, Oregon
[Signed] Ralph Turner (Water Well Contractor)
Contractor's License No. 247 Date 2-10-73 19

(USE ADDITIONAL SHEETS IF NECESSARY)

APPENDIX B

Water Chemistry
Bacteriology
EPA Certified
State Certified

Water Analysis & Consulting, Inc.
304 BLAIR BLVD. • EUGENE, OREGON 97402
503-485-8404

RECEIVED 8/27/84 JP

Lab Report No. 045249
Inv. No.: 2210
Cust. PO No.: _____

REPORT OF ANALYSIS OF DRINKING WATER FOR SECONDARY CHEMICAL CONTAMINANTS*

NAME City of St. Helens,
ADDRESS P.O. Box 278
St. Helens, OR 97051

COLLECTED DATE 3/2/84 BY Customer
RECEIVED DATE 3/5/84 TIME _____
ANALYZED DATE " TIME _____

WATER SYSTEM Same SOURCE Well

CRITERIA

Physical & Chemical	Max Allowable Concentration	Desirable	Test Results
Chlorides	250 mg/l	< 25 mg/l	10 mg/l
Copper	5.0 mg/l	NONE	0.23 mg/l
Hardness (as $CaCO_3$)	250 mg/l	< 60 mg/l	88 mg/l
Iron	0.3 mg/l	NONE	0.03 mg/l
Manganese	0.05 mg/l	NONE	0.02 mg/l
pH	6.5 <	7.0-8.0	6.7
Solids: (Residue)			
Filterable ("Total Solids")	500 mg/l	<100 mg/l	170 mg/l
Nonfilterable ("Sand")	2.0 mg/l	NONE	2 mg/l
Specific Conductance			170 µmho/cm
Sulfates	250 mg/l	25 mg/l	1 mg/l
Total Dissolved Solids (Est)	500 mg/l	<100 mg/l	110 mg/l
Zinc	5.0 mg/l	<0.5 mg/l	<0.01 mg/l

*(OAR Chapter 333/Section 42-210 revised 2/82)

_____ Date 3/15/84

APPENDIX B

Water Analysis & Consulting, Inc.
304 BLAIR BLVD.
EUGENE, OREGON 97402
503 485-8404

Lab Report No: 045249
Inv. No: 2210
Customer PO No: _____

CORROSIVITY

NAME City of St. Helens
ADDRESS P.O. Box 278
St. Helens, OR 97051
SAMPLERS: CUSTOMER ☐ WACI ☐

SOURCE Columbia River/Ranney Collector
LOCATION City Hall tap
DATE COLLECTED 3/2/84 BY Customer
DATE ANALYZED _____

		Test Results
( )	CORROSIVITY: LANGLIER SATURATION INDEX	-1.6*
( )		
( )	Filterable Solids	170 mg/l
( )		
( )	pH	6.7
( )		
( )	Temperature	12 °C
( )		
( )	Alkalinity	78 mg/l
( )		
( )	Calcium Hardness	88 mg/l
( )		
( )	*Moderately aggressive water	

Date 3/15/84

APPENDIX C

Notification of Hazardous Waste Site

United States
Environmental Protection
Agency
Washington DC 20460

Please type or print in ink. If you need additional space, use separate sheets of paper. Indicate the letter of the item which applies.

Pub. Aff. 82

New Site
High Hazard = 75% (ORS 000 001 032)

A Person Required to Notify:
Enter the name and address of the person or organization required to notify.

Name: Owens-Corning Fiberglas Corporation
Street: Fiberglas Tower
City: Toledo State: Ohio Zip Code: 43659

B Site Location:
Enter the common name (if known) and actual location of the site

Name of Site: Owens-Corning Fiberglas Corporation
Street: Old Portland Road
City: St. Helens County: State: OR Zip Code: 97051

C Person to Contact:
Enter the name, title (if applicable), and business telephone number of the person to contact regarding information submitted on this form.

Name (Last, First and Title): William L. Kreutz, Esquire
Phone: (419) 248-8220

D Dates of Waste Handling:
Enter the years that you estimate waste treatment, storage, or disposal began and ended at the site.

From (Year): 1930 To (Year): Present

E Waste Type: Choose the option you prefer to complete

Option 1: Select general waste types and source categories. If you do not know the general waste types or sources, you are encouraged to describe the site in Item I—Description of Site.

General Type of Waste:
Place an X in the appropriate boxes. The categories listed overlap. Check each applicable category.

1. ☐ Organics
2. ☐ Inorganics
3. ☐ Solvents
4. ☐ Pesticides
5. ☐ Heavy metals
6. ☐ Acids
7. ☐ Bases
8. ☐ PCBs
9. ☐ Mixed Municipal Waste
10. ☒ Unknown
11. ☐ Other (Specify)

Source of Waste:
Place an X in the appropriate boxes.

1. ☐ Mining
2. ☐ Construction
3. ☐ Textiles
4. ☐ Fertilizer
5. ☐ Paper/Printing
6. ☐ Leather Tanning
7. ☐ Iron/Steel Foundry
8. ☐ Chemical, General
9. ☐ Plating/Polishing
10. ☐ Military/Ammunition
11. ☐ Electrical Conductors
12. ☐ Transformers
13. ☐ Utility Companies
14. ☐ Sanitary/Refuse
15. ☐ Photofinish
16. ☐ Lab/Hospital
17. ☐ Unknown
18. ☒ Other (Specify)
Mfg. Wood Fiber Products

Option 2: This option is available to persons familiar with the Resource Conservation and Recovery Act (RCRA) Section 3001 regulations (40 CFR Part 261).

Specific Type of Waste:
EPA has assigned a four-digit number to each hazardous waste listed in the regulations under Section 3001 of RCRA. Enter the appropriate four-digit number in the boxes provided. A copy of the list of hazardous wastes and codes can be obtained by contacting the EPA Region serving the State in which the site is located.

Form Approved
OMB No. 2000-0138
EPA Form 8900-1

APPENDIX C

Notification of Hazardous Waste Site — Side Two

Pub. A[illegible]

F Waste Quantity:

Place an X in the appropriate boxes to indicate the facility types found at the site.

In the "total facility waste amount" space give the estimated combined quantity (volume) of hazardous wastes at the site using cubic feet or gallons.

In the "total facility area" space, give the estimated area size which the facilities occupy using square feet or acres.

Facility Type

1. ☐ Piles
2. ☐ Land Treatment
3. ☐ Landfill
4. ☐ Tanks
5. ☐ Impoundment
6. ☐ Underground Injection
7. ☐ Drums, Above Ground
8. ☐ Drums, Below Ground
9. ☒ Other (Specify) Wastewater Treatment

Total Facility Waste Amount

cubic feet: See site description (Section I)

gallons:

Total Facility Area

square feet:

acres: See site description below (Section I)

G Known, Suspected or Likely Releases to the Environment:

Place an X in the appropriate boxes to indicate any known, suspected, or likely releases of wastes to the environment.

☐ Known ☐ Suspected ☒ Likely ☐ None

Note: Items H and I are optional. Completing these items will assist EPA and State and local governments in locating and assessing hazardous waste sites. Although completing the items is not required, you are encouraged to do so.

H Sketch Map of Site Location: (Optional)

Sketch a map showing streets, highways, routes or other prominent landmarks near the site. Place an X on the map to indicate the site location. Draw an arrow showing the direction north. You may substitute a publishing map showing the site location.

I Description of Site: (Optional)

Describe the history and present conditions of the site. Give directions to the site and describe any nearby wells, springs, lakes, or housing. Include such information as how waste was disposed and where the waste came from. Provide any other information or comments which may help describe the site conditions.

Information on the hazardous waste activity at the St. Helens Plant is quite sketchy. There were apparently small amounts of various chemical materials which have been used at the Plant over the years that may have entered the water systems through the fabrication process or intentional discharge. The wastewater treatment operation would then process the water for eventual reuse as process make-up water or it would be discharged to the Scappose Bay where it is regulated by an N.P.D.E.S. permit. Sludge from the lagoon has been disposed of within the approval of the Oregon Department of Environmental Quality.

J Signature and Title:

The person or authorized representative (such as plant managers, superintendents, trustees or attorneys) of persons required to notify must sign the form and provide a mailing address (if different than address in item A). For other persons providing notification, the signature is optional. Check the boxes which best describe the relationship to the site of the person required to notify. If you are not required to notify check "Other."

Name: William L. Kreutz, Esquire

Owens-Corning Fiberglas Corporation

Street: Fiberglas Tower

City: Toledo State: Ohio Zip Code: 43659

Signature: W. L. Kreutz Date: 6-9-81

☐ Owner, Present
☐ Owner, Past
☐ Transporter
☒ Operator, Present
☐ Operator, Past
☐ Other

APPENDIX D

1014 S.E. Couch Street, Portland, Oregon 97232

MEMORANDUM

TO: Wayne Hanson

FROM: Tom Bispham

SUBJECT: Plant Survey at Kaiser Gypsum, St. Helens, Oregon

On 16 September 1969, Bob Harris and myself met with Mr. Jack Cassidy, Plant Manager of Kaiser Gypsum. Our purpose was to inform Mr. Cassidy of the recent odor complaints and conduct a plant survey for the identification of other possible sources of air pollution. This plant produces a variety of items ranging from basic wood fiber board to mineral wool board. The products are used for acoustical and insulating properties.

Plant Survey

This plant employes 250 people and some phase of operation, if not the entire plant, is in production 365 days per year.

Boilers

Three automatic Erie boilers are operated in series, each producing 20,000 lbs/of steam.

Coen burners.

Operators do not have a view of the stack nor a means of emission detection.

Fuel used is natural gas with bunker C oil for standby. In August 1969, 712,000 therms were burned which is probably close to an average monthly consumption. Fuel costs average close to $1000/day. During a normal year the plant may be on oil for approximately 25-30 days.

Basic Board Production

Basic board is the main production item of this plant. With an exception of four days per month when the plant is producing mineral wool board, basic board production will be conducted 24 hrs/day, 7 days/week. Capacity is 150 tons/day (350,000 sq. ft.) or 10 million sq. ft./mo. of 3/8" to 1" thickness.

Raw materials are simply sawdust and wood chips (Douglas fir, spruce, hemlock, and white fir). Process flows is described on the attached sheet.

Remanufacturing

Of the 150 tons of basic board produced daily, 75 tons is shipped and the remaining 75 tons will undergo some form of remanufacturing. The various remanufacturing process is described below.

Tile Lines

Prior to entering the tile line, basic board is passed through a planer, V-jointer, and a calender machine (coating applicator, water soluble). The fibers

APPENDIX D

from the planer and jointer are vented through the heading cyclone. The calender machine presents no problem.

These tele lines are utilized for the manufacturing of lay-in board for acoustical ceilings, planks, and mobile home ceilings. This operation is conducted 5 days/week, 24 hours/day. Lines #1 and #2 are identical; the basic board undergoing cutting, painting, drying, recutting, and wrapping. Emission from cutting are vented to a 12' diameter cyclone. As water base paint is used, no problem is created. Fifteen tons/day is processed in these lines, namely items such as lay-in ceiling tile.

Tile line #3 is basically the same as #1 and #2 except the only product is 4' ceiling board which is used in mobile homes. The resaw on this line is vented to a 10' diameter cyclone. 45 tons/day is processed thru this line.

It is unknown at this date whether these cyclones are in compliance.

Asphalt Coating

Basic board from the headrig is removed to a building used expressly for asphalt coating. The board is passed through an uncontrolled asphalt saturator (both sides saturated), cooled by water and conveyed to the wrapping area. Some resawing occurrs here, the dust being vented to a small cyclone and then to the headrig cyclone. This operation takes place 1-2 dys/wk for 8 hour periods. Fifteen tons/day is processed.

Expansion Jointing

Basic board is again removed to a separate building for this operation. The board is immersed in a tank containing asphalt and a naptha solvent. It is then dried in a steam heated kiln. The odors from the coating and drying operation emit extremely strong odors. This 8 hr. operation occurs 2-3 days per month. This paint is used on sidewalks, etc.

Mineral Wood Board

Mineral wool board is one item produced which is also used for ceilings and insulation. Its desireable qualities are that it is non-combustible and stronger than basic board. Production occurs approximately 4 days per month. Capacity is 150 tons/day. As mentioned before, when this item is in production, basic board production is down, as the same manufacturing and control equipment is used.

The raw materials used are, mineral wool, clay and starch. They are introduced into the Fourdrinier board forming machine (described on the flow chart)

APPENDIX D

Paint

Kaiser Gypsum mixes its own paints. This is a water base paint and presents no air pollution problem. 60,000 gallons are produced each month.

Waste disposal

Currently approximately 2 cubic yards of paper sacks and crates are generated daily. Kaiser Gypsum is disposing of this waste by open burning.

Air Pollution Problems

Open burning - Mr. Cassidy was informed that this is a problem which we expected him to clear up as soon as possible. Although the area is out of the public's sight, Kaiser Gypsum does employ a large number of people who are aware of this practice. He informed us that his desire is to utilize his waste by installing a hydropulper and putting the residue back into the process. We informed him that the time required for approval, 3 months, was too long and that we expected him to use total haulaway and would be applying the appropriate pressure to do so.

Odor - Extremely strong odors are emitted from both the asphalt saturator and expansion joint operation. This problem is one which the Columbia County Health Department is retieving complaints. Kaiser Gypsum is in hopes of discontinuing this line. However, no date is foreseeable. Mr. Cassidy was told that odor surveys would be conducted.

Opacity

Mr. Cassidy was told that in all probability that the asphalt saturator was in violation. However, reading have never been taken. This will be done in the near future.

Also the cyclone emissions have never been documented. This is also scheduled in the near future.

The following control program was outlines to Mr. Cassidy:

Field personnel would conductodor surveys and opacity readings on the sources which appeared to be a problem. When the problem areas have been clearly defined to our satisfaction, CWAPA representatives would meet with Kaiser Gypsum and outline these areas and what we expected from Kaiser Gypsum.

This program was acceptable to Mr. Cassidy. As several of these sources are within the plant, he requested we check in with the office when travelling through the plant.

In his absence, contact Assistant Manager Murel Kontny.

APPENDIX E

ATTACHMENT #2
-SLUDGE CHEMICAL ANALYSIS
SUBMITTED TO D.E.Q. FOR APPROVAL

EXPRESS MAIL

October 31, 1980

Mr. Charles Gray
Oregon Dept. of Environmental Quality
P.O. Box 1760
Portland, Oregon 97207

Re: St. Helens - Solid Waste

Dear Mr. Gray:

Following up on our conversation October 30, 1980, we have provided below the additional information you requested to enable you to approve disposal of our pond dredgings at Scapoose.

1. Quantity

   We have an immediate requirement to dispose of about 400,000 gallons of dredgings. This will be a recurring need but it is difficult at this time to project quantities and timing.

2. General Description

   Attached lab results show % solids and % volatile solids in the dredgings. The % volatile solids represents the presence of organics from the wood pulp in the pond bottoms.

3. Metals

   Samples of sludge and aeration pond dredging were subjected to USEPA EP extraction and the extract analyzed for metals as follows (ND is none detected - limit 1 µg/l)

Metal (mg/l)	Sludge Pond	Aeration Pond
Barium	ND	ND
Cadmium	ND	ND
Chromium	ND	ND
Lead	ND	ND
Silver	ND	ND
Arsenic	0.01	0.003
Selenium	0.01	<0.001
Mercury	ND	ND
Antimony	0.002	ND

Charles Gray - Portland, Oregon

4. Toxic Materials

Effluent sample was checked for all organics on the 129 priority pollutant list. Only the following were detected.

Number	Chemical	µg/l (parts per billion)
44.	Methylene Chloride	9.08
64.	Pentochlorophenol	1.126
68.	Di-N-Butylphthalate	1.52

We consider these results to be a credit to the power of modern analytical techniques and essentially a clean bill of health for our waste.

From our sampling of other water, we would classify the methylene chloride and phthalate ester as low background. Pentochlorophenol is a wood preservative and could be tramp in the sawdust or wood chips we use.

Sincerely,

OWENS-CORNING FIBERGLAS CORP.

C. A. Harrison
CAH:dg

bcc: Dennis Barcheski - St. Helens
Bruce Paskett - St. Helens
S. H. Thomas - BT/552

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

EPA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
OR	D0903476109

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Owens - Corning Fiberglas Corp.	Old Portland Road

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
St. Helens	OR	97051	Columbia	009	03

09 COORDINATES: LATITUDE 45 50 50.0 | LONGITUDE 122 49 02.0

10 TYPE OF OWNERSHIP (Check one)
☒ A. PRIVATE ☐ B. FEDERAL _____ ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL
☐ F. OTHER _____ ☐ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION	02 SITE STATUS	03 YEARS OF OPERATION
8 / 30 / 84 (MONTH DAY YEAR)	☐ ACTIVE ☒ INACTIVE	1930 (BEGINNING YEAR) Dec 81 (ENDING YEAR) ___ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply)
☐ A. EPA ☒ B. EPA CONTRACTOR Ecology & Environment, Inc. (Name of firm) ☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR _____ (Name of firm)
☐ E. STATE ☐ F. STATE CONTRACTOR _____ (Name of firm) ☐ G. OTHER _____ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
James Pitts	Inspection Team Leader	E&E	(206) 624-9537
09 OTHER INSPECTORS	**10 TITLE**	**11 ORGANIZATION**	**12 TELEPHONE NO.**
Eileen Black	Inspection Team Member	E&E	(206) 624-9537
			( )
			( )
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
Marlene Warren	Facility Manager	1645 RR Ave. St. Helens	(503) 397-0704
Bob Lalande	Security & Maintenance	1645 RR Ave. St. Helens	(503) 397-0704
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
XX PERMISSION ☐ WARRANT	1400 hrs.	Clear 60°

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
Debbie Flood	Environmental Protection Agency	(206) 442-2722

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
James Pitts	FIT/EPA	E&E	624-9537	11 / 20 / 84 (MONTH DAY YEAR)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
OR	D093446109

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- XX A. SOLID
- ☐ B. POWDER, FINES
- XX C. SLUDGE
- ☐ D. OTHER (Specify)
- ☐ E. SLURRY
- ☐ F. LIQUID
- ☐ G. GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

- TONS: ____
- CUBIC YARDS: 7212 (est)
- NO. OF DRUMS: ≅ 30

03 WASTE CHARACTERISTICS (Check all that apply)

- ☐ A. TOXIC
- ☐ B. CORROSIVE
- ☐ C. RADIOACTIVE
- ☐ D. PERSISTENT
- ☐ E. SOLUBLE
- ☐ F. INFECTIOUS
- ☐ G. FLAMMABLE
- XX H. IGNITABLE
- ☐ I. HIGHLY VOLATILE
- ☐ J. EXPLOSIVE
- ☐ K. REACTIVE
- ☐ L. INCOMPATIBLE
- ☐ M. NOT APPLICABLE

ignitable if dry

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE	7212 (est)	Cubic yard	Fiberous Solids (Dry Solids)
OLW	OILY WASTE			
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
SLU	Arsenic	7440-38-2	sludge pond	10.	ug/l
SLU	Selenium	7782-49-2	sludge pond	10.	ug/l
SLU	Antimony	7440-36-0	sludge pond	2.	ug/l
SLU	Methylene chloride	75-09-2	discharged to Scappoose Bay	9.08	ug/l
SLU	Pentachlorophenol	87-86-5	" " "	1.126	ug/l
SLU	Di-N-Butylphthalate	84-74-2	" " "	1.52	ug/l
		1332-21-4			
Unk	Asbestos used (62-66)		Unknown	Unknown	Unknown
	Analysis provided by Owens-Corning Fiberglas to Oregon Department of				
	Environmental Quality - Oct 1980				

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS	N/A		FDS	N/A	
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Sludge chemical analysis submitted to DEQ, Oct. 31, 1980, by Owens-Corning Fiberglas. Amount of sludge present is an estimation taken from aerial photographs with a estimated 10ft. depth (See Fig. 4 Site Inspection Report on Owens-Corning Fiberglas, Ecology and Environment, Inc.)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
OR	D093476109

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 [X] A. GROUNDWATER CONTAMINATION — 02 [ ] OBSERVED (DATE: _____) — [X] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Lagoon is unlined.

01 [X] B. SURFACE WATER CONTAMINATION — 02 [ ] OBSERVED (DATE: _____) — [X] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Creek west and north of site, run off from site could enter Scappoose Bay

01 [X] C. CONTAMINATION OF AIR — 02 [ ] OBSERVED (DATE: _____) — [ ] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Asphalt process used Naptha which caused complaints from residents in early 1970. Process discontinued.

01 [ ] D. FIRE/EXPLOSIVE CONDITIONS — 02 [ ] OBSERVED (DATE: _____) — [ ] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

01 [ ] E. DIRECT CONTACT — 02 [ ] OBSERVED (DATE: _____) — [ ] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Area is not fenced on water boundries. Thick brush acts as fence.

01 [ ] F. CONTAMINATION OF SOIL — 02 [ ] OBSERVED (DATE: _____) — [ ] POTENTIAL — [ ] ALLEGED
03 AREA POTENTIALLY AFFECTED: _____ (Acres) — 04 NARRATIVE DESCRIPTION

01 [ ] G. DRINKING WATER CONTAMINATION — 02 [ ] OBSERVED (DATE: _____) — [ ] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

One known well in Section 9. (See Site Inspection Report on Owens-Corning Fiberglas Ecology and Environment, Inc., Appendix A). No wells downgradient of the site.

01 [ ] H. WORKER EXPOSURE/INJURY — 02 [ ] OBSERVED (DATE: _____) — [ ] POTENTIAL — [ ] ALLEGED
03 WORKERS POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Unknown

01 [ ] I. POPULATION EXPOSURE/INJURY — 02 [ ] OBSERVED (DATE: _____) — [ ] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Unknown

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
OR	D093476109

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

None

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)

None

01 XX L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: 4/29/74) XX POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Sludge was applied to farmland.

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES (Spills/Runoff/Standing liquids, Leaking drums) — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION

None

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

None

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

None

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Unknown

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

None

III. TOTAL POPULATION POTENTIALLY AFFECTED: 9,000-10,000

IV. COMMENTS

Lagoon is unlined, leachate from lagoon would enter Scappoose Bay. Sludge was applied to farmland. Runoff from site could enter Scappoose Bay.

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Interview with facilities manager; well logs from State of Oregon; Owens-Corning Fiberglas Report on Sludge Analysis.

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
OR	D093476109

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)

	SURFACE	WELL
COMMUNITY	A. ☐	B. ☒
NON-COMMUNITY	C. ☐	D. ☒

02 STATUS

ENDANGERED	AFFECTED	MONITORED
A. ☐	B. ☐	C. ☒
D. ☐	E. ☐	F. ☐

03 DISTANCE TO SITE

A. 2.5 (mi)

B. ≅ ½ (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

☐ A. ONLY SOURCE FOR DRINKING ☒ B. DRINKING (Other sources available) COMMERCIAL, INDUSTRIAL, IRRIGATION (No other water sources available) ☐ C. COMMERCIAL, INDUSTRIAL, IRRIGATION (Limited other sources available) ☐ D. NOT USED, UNUSEABLE

02 POPULATION SERVED BY GROUND WATER unknown

03 DISTANCE TO NEAREST DRINKING WATER WELL ≅ ½ (mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
1-6 (ft)	east/southeast	unknown (ft)	unknown (gpd)	☐ YES ☐ NO unknown

09 DESCRIPTION OF WELLS (Including usage, depth, and location relative to population and buildings)

One well registered in Section 9 - Domestic - 140Ft. - Northwest of site.

10 RECHARGE AREA		11 DISCHARGE AREA	
☒ YES ☐ NO	COMMENTS: During high river flow periods	☒ YES ☐ NO	COMMENTS: Groundwater discharge to Scappoose Bay

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

☒ A. RESERVOIR, RECREATION DRINKING WATER SOURCE ☐ B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES ☐ C. COMMERCIAL, INDUSTRIAL ☐ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED	DISTANCE TO SITE
Milton Creek	☐	¼ < (mi)
Scappoose Bay	☐	¼ < (mi)
	☐	(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. 600 NO. OF PERSONS	B. 8,000 NO. OF PERSONS	C. 10,000 > NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION

¼ < (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE

2,866

04 DISTANCE TO NEAREST OFF-SITE BUILDING

¼ < (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site, e.g., rural, village, densely populated urban area)

The land use in the vicinity of the plant is light industry. One and one half miles to the north is the City of St. Helens, OR Population - 7,000

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE: OR | 02 SITE NUMBER: D093476109

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

☐ A. $10^{-6} - 10^{-8}$ cm/sec ☐ B. $10^{-4} - 10^{-6}$ cm/sec ☐ C. $10^{-4} - 10^{-3}$ cm/sec ☒ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

☒ A. IMPERMEABLE (Less than 10^{-6} cm/sec) ☐ B. RELATIVELY IMPERMEABLE ($10^{-4} - 10^{-6}$ cm/sec) ☐ C. RELATIVELY PERMEABLE ($10^{-2} - 10^{-4}$ cm/sec) ☐ D. VERY PERMEABLE (Greater than 10^{-2} cm/sec)

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH	
2-5 (ft)	Unknown (ft)	5.6-6.0	

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
24 (in)	2.0 (in)	5 %	south	0-5 %

09 FLOOD POTENTIAL

SITE IS IN 100 YEAR FLOODPLAIN

10 ☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE: A. ¼< (mi) OTHER: B. _____ (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species)

2 (mi)

ENDANGERED SPECIES: Whitetail deer

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS; NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS: PRIME AG LAND	AGRICULTURAL LANDS: AG LAND
A. 1 (mi)	B. 1½ (mi)	C. _____ (mi)	D. _____ (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

Owens-Corning Fiberglas Fiberboard plant is surrounded on the west and south by Scappoose Bay and on the east by Milton Creek. The area to the north of the plant is light industrial.

VII. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis reports)

USDA-SCS-Soil interpretations - Record of Columbia County;
USGA Topographical map-St. Helens Quandrangle;
US Census, 1980

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
OR	D093476109

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
XX A. NPDES	1643 J	Unknown		No discharge since Feb. 82
☐ B. UIC				
XX C. AIR	82052085	Unknown		No discharge since Feb. 82
☐ D. RCRA				
☐ E. RCRA INTERIM STATUS				
XX F. SPCC PLAN	Unknown	Unknown		
☐ G. STATE (Specify)				
☐ H. LOCAL (Specify)				
☐ I. OTHER (Specify)				
☐ J. NONE				

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
☐ A. SURFACE IMPOUNDMENT		
☐ B. PILES		
XX C. DRUMS, ABOVE GROUND	≅ 30 drums	
☐ D. TANK, ABOVE GROUND		
XX E. TANK, BELOW GROUND	Oil tank at boiler house	
☐ F. LANDFILL		
XX G. LANDFARM		
XX H. OPEN DUMP	Waste burned on site until 1970.	
☐ I. OTHER (Specify)		

04 TREATMENT (Check all that apply)

- ☐ A. INCENERATION
- ☐ B. UNDERGROUND INJECTION
- XX C. CHEMICAL/PHYSICAL
- XX D. BIOLOGICAL
- ☐ E. WASTE OIL PROCESSING
- ☐ F. SOLVENT RECOVERY
- ☐ G. OTHER RECYCLING/RECOVERY
- ☐ H. OTHER (Specify)

05 OTHER

- XX A. BUILDINGS ON SITE

06 AREA OF SITE

175 (Acres)

07 COMMENTS

Site has secondary treatment plant, main components of plant are primary clarifier, aeration lagoon, secondary clarifier & sludge holding pond. Drums contain latex and silicone paint waste.

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

☐ A. ADEQUATE, SECURE | XX B. MODERATE | ☐ C. INADEQUATE, POOR | ☐ D. INSECURE, UNSOUND, DANGEROUS

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC.

The sludge pond and aeration lagoon are unlined, which would allow leachate to escape.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☐ YES XX NO

02 COMMENTS

Although area is not completely fenced, the brush around river serves as a fence.

VI. SOURCES OF INFORMATION (Cite specific references, e.g. state files, sample analysis, reports)

Site interview with facilities manager, Marlene Warren;
DEQ files; EPA files

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 6 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
OR	D093476109

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER	None		
SURFACE WATER			
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL			
VEGETATION			
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
None	

IV. PHOTOGRAPHS AND MAPS

01 TYPE ☐ GROUND ☒ AERIAL

02 IN CUSTODY OF Owens Corning Fiberglas St. Helens, OR
(Name of organization or individual)

03 MAPS ☒ YES ☐ NO

04 LOCATION OF MAPS EPA Seattle WA

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

DEQ Files; EPA Files; Site interview with the facilities manager, Marlene Warren

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
OR	D093476109

II. CURRENT OWNER(S)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE
Owens-Corning Fiberglas Corp.		Fiberglas Tower		Toledo	OH	43659

PARENT COMPANY (If applicable)

08 NAME	09 D+B NUMBER	10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE	12 CITY	13 STATE	14 ZIP CODE

III. PREVIOUS OWNER(S) (List most recent first)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE
Kaiser Gypsum		300 Lakeside Dr.		Oakland	CA	94612
Firtex Insulation Board Co.		Old Portland Rd.		St. Helens	OR	

IV. REALTY OWNER(S) (If applicable; list most recent first)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE
Dant & Russel Inc.		1221 SW Yamhill		Portland	OR	

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION
01 STATE: OR | 02 SITE NUMBER: D093476109

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION
None

01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION
None

01 ☐ C. PERMANENT WATER SUPPLY PROVIDED — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION
None

01 ☐ D. SPILLED MATERIAL REMOVED — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION
None

01 ☐ E. CONTAMINATED SOIL REMOVED — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION
None

01 ☐ F. WASTE REPACKAGED — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION
None

01 ☐ G. WASTE DISPOSED ELSEWHERE — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION
None

01 ☐ H. ON SITE BURIAL — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION
None

01 ☐ I. IN SITU CHEMICAL TREATMENT — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION
None

01 ☐ J. IN SITU BIOLOGICAL TREATMENT — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION
None

01 ☐ K. IN SITU PHYSICAL TREATMENT — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION
None

01 ☐ L. ENCAPSULATION — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION
None

01 ☐ M. EMERGENCY WASTE TREATMENT — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION
None

01 ☐ N. CUTOFF WALLS — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION
None

01 ☐ O. EMERGENCY DIKING/SURFACE WATER DIVERSION — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION
None

01 ☐ P. CUTOFF TRENCHES/SUMP — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION
None

01 ☐ Q. SUBSURFACE CUTOFF WALL — 02 DATE ____ — 03 AGENCY ____
04 DESCRIPTION
None

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
OR	D093476109

II. PAST RESPONSE ACTIVITIES (Continued)

01 ☐ R. BARRIER WALLS CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ S. CAPPING/COVERING — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ T. BULK TANKAGE REPAIRED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ U. GROUT CURTAIN CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ V. BOTTOM SEALED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ W. GAS CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ X. FIRE CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ Y. LEACHATE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ Z. AREA EVACUATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ 1. ACCESS TO SITE RESTRICTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ 2. POPULATION RELOCATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

01 ☐ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION
None

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA File; DEQ Files; Site interview with facilities manager, Marlene Warren

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
OR	D093476109

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ☐ YES XX NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA Files; DEQ Files

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
OR	D093476109

II. CURRENT OPERATOR (Provide if different from owner)

01 NAME	02 D+B NUMBER
Owens-Corning Fiberglas Co.	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
Old Portland Rd.	

05 CITY	06 STATE	07 ZIP CODE
St. Helens	OR	97051

08 YEARS OF OPERATION	09 NAME OF OWNER
1978-81	S/A

OPERATOR'S PARENT COMPANY (If applicable)

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

III. PREVIOUS OPERATOR(S) (List most recent first; provide only if different from owner)

PREVIOUS OPERATORS' PARENT COMPANIES (If applicable)

01 NAME	02 D+B NUMBER	10 NAME	11 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

01 NAME	02 D+B NUMBER	10 NAME	11 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

01 NAME	02 D+B NUMBER	10 NAME	11 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	14 CITY	15 STATE	16 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

IV. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sampling results, reports)

Site interview with the facilities manager, Marlene Warren

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
OR	D093476109

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER
Owens-Corning Fiberglas	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
Old Portland Rd.	

05 CITY	06 STATE	07 ZIP CODE
St. Helens	OR	97051

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
None			
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
Unknown			
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE
01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
05 CITY	06 STATE / 07 ZIP CODE	05 CITY	06 STATE / 07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)